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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,922	04/02/2004	Hideki Tominaga	D-1587	9419

7590 04/05/2005

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1423 Powhatan Street  
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EXAMINER
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VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 10/815,922	Applicant(s) TOMINAGA ET AL.	
	Examiner Gail Verbitsky	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: the "light selecting means" as stated in claims 1 and 5 has not been described in the specification.

Appropriate correction is required.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "light selecting means" must be shown or the feature(s) canceled from the claim(s) 1, 5. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In this case, the light selecting means has not been described in the specification. Furthermore, please note, that in the rejection on the merits, the examiner considers that the light selecting means constituted by first and second filters as stated in claim 5.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of 35 U.S.C. 102(e) which forms the basis for all obviousness rejections set forth in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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6. Claims 1 (as best understood by the Examiner) rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (U.S. 20040208230A1) [hereinafter Lee].

Lee discloses in Fig. 3A-3D a two color/ two wavelengths (visible/ infrared) thermometer comprising a light receiving means (one image pickup) 31 being a CCD, inherently, having a plurality of micro-photo elements (pixels), inherently, arranged two-dimensionally. The thermometer also comprises a light separating means (light diverging means) 32 separating/ diverging light onto an IR detecting means (first area) 33 and a visible light detecting means (second area) 34 of the CCD. The fact that the thermometer has a display for displaying a temperature corresponding to IR radiation and visible light (page 3, claim 19) acquired by the CCD, would imply that the thermometer has some temperature calculating/ processing means electrically connected to said image pick up device 31.

The device further comprises a light selecting means including an infrared (first) filter 36 and a visible (second) filter 37, and formed in front of (front side) of the image pickup device comprising an IR detecting means and a visible light detecting means 33 and 34 respectively, as shown in Fig. 3D.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3 (as best understood by Examiner) are rejected under 35 U.S.C. 102(b) as being anticipated by Fontenot et al. (U.S. 5910816) [hereinafter Fontenot].

Fontenot discloses in Fig. 1 a device comprising directing a visible (first wavelengths) and IR (second wavelengths) rays from light diverging/ separating means an imaging lens directing light to a CCD (one image pickup device/ two-dimensional arrangement of pixels/ micro photo receiving elements) having light receiving surface including two areas, first area of the light receiving surface of the CCD is designated for first wavelengths (visible light) and second area is designated for second wavelengths (IR). The light diverging means comprises a prism 2 having two edges (two prism surfaces, thus, acting as two prisms), the edges (two prisms) are equipped with a (first) filter 4 to block IR and a (second) visible light blocking filter 14a, the filters 4 and 14a constituting a light selecting means directing said visible light and said IR to their respective first and second areas (col. 2, lines 65-67 and col. 3, lines 1-7). The device also comprises a display where the images corresponding the two wavelengths are recombined and displayed. This would imply, that the device comprising some means (processing electronics 8, 16/ temperature calculating means) for processing images and making them understandable for an operator in terms of at least IR/ thermal image, which is representative of temperature of the object of interest.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 4-5 (as best understood by Examiner) are rejected under 35 U.S.C. 103(a) as being unpatentable over Fontenot in view of Chen et al. (U.S. 20030227680) [hereinafter Chen].

Fontenot discloses the device as stated above.

Fontenot does not explicitly teach that the light diverging means includes a first polarizing beam splitter and a second polarizing beam splitter, as stated in claim 4 with the remaining limitations of claim 5.

Chen discloses a device comprising a first polarizing beam splitter and second polarizing beam splitter to receive and polarize different spectrum (wavelengths).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Fontenot, so as to have the first and second beam splitters, as taught by Chen, so as to effectively separate the spectrum, in order to provide more accurate results.

#### **Conclusion**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky

Primary Patent Examiner, TC 2800



March 16, 2005